

Applicants : Donald Fedyk, et al.
Serial No. : 09/645,186
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Attorney Docket No.: 10360-062001
Client Ref.: 11499TCUS01U

REMARKS

Claims 1 to 3, 5 to 14, 17 to 22, 24 to 33, 36 to 41, 43 to 54, and 57 to 59 are pending in the application, of which claims 1, 13, 20, 32, 39 and 53 are independent. Favorable reconsideration and further examination are respectfully requested.

Initially, as requested in the Office Action, a new set of drawings is being filed herewith. This new set of drawings includes a clearer Fig. 2. No new matter has been added. Approval of the drawings is respectfully requested.

In the Office Action, claims 1, 2, 4, 5, 7 to 10, 13, 16, 17, 20, 21, 24, 26 to 29, 32, 35, 36, 39, 40, 45 to 48, 53, 56 and 57 were rejected under 35 U.S.C. §103 over U.S. Patent No. 6,363,319 (Hsu); claims 3, 6, 14, 15, 22, 23, 25, 33, 34, 41 to 44, 54 and 55 were rejected under §103 over Hsu in view of U.S. Patent No. 6,034,946 (Roginsky); and claims 11, 12, 18, 19, 30, 31, 37, 38, 49, 50 to 52, 58 and 58 were rejected under §103 over Hsu in view of U.S. Patent No. 5,687,167 (Bertin). As shown above, Applicants have amended the claims to define the invention with greater clarity. In view of these clarifications, withdrawal of the art rejections is respectfully requested.

Amended independent claim 1 allocates a network resource to a data path. The method of claim 1 includes selecting a network path having a least number of hops to a destination, determining if a sufficient amount of the network resource is available in the network path to accommodate the data path, and deciding whether to allocate the network resource in the network path to the data path based on the amount of the network resource in the network path and the number of hops to the destination. If the network resource is

not allocated to the datapath, the method is repeated one or more times, each time using a network path having a progressively larger number of hops to the destination.

The applied art is not understood to disclose or to suggest the foregoing features of claim 1, particularly with respect to selecting a network path having a least number of hops to a destination, and repeating the method one or more times if the network resource is not allocated to the datapath, each time using a network path having a progressively larger number of hops to the destination.

In this regard, Hsu describes routing a flow along a network path having sufficient bandwidth to accommodate the flow. To determine the sufficiency of the bandwidth, the Hsu system calculates a cost bias factor for each link in the network path. This cost bias factor is a function of the link's availability and the priority assigned to the flow (see, e.g., column 3, lines 10 et seq.). The Hsu system selects a path with a sufficient bandwidth to minimize cumulative biased cost. In selecting the path, the Hsu system considers a number of network paths and the costs thereof (see, e.g., column 1, lines 43 to 49). The Hsu system does not first select a network path having a least number of hops, and then repeat its method if that network path does not result in bandwidth allocation, much less repeat its method using network paths having progressively larger numbers of hops.

In this regard, as correctly noted in the Office Action, column 5, lines 51 et seq. does mention a number of hops. What that portion of Hsu is saying is that if the cost metric of all router links has a value of one, then the cumulative cost metric is equivalent to the number of hops (since the cumulative cost metric is determined by adding the cost metrics of individual router links). This, however, has nothing whatsoever to do with

selecting a network path having a least number of hops to a destination, and then repeating selecting, determining and deciding (as set forth in claim 1) one or more times if the network resource is not allocated to the datapath, each time using a network path having a progressively larger number of hops to the destination.

For at least the foregoing reasons, claim 1 is believed to be allowable. Amended independent claim 20 is a computer program claim that roughly corresponds to claim 1; and amended independent claim 39 is an apparatus claim that roughly corresponds to claim 1. These claims are also believed to be allowable for at least the reasons noted above.

Amended independent claim 13 defines a method of configuring a label switched path (LSP) through a multiprotocol label switching (MPLS) network. The method includes selecting a network path in the MPLS network that has a least number of hops to a destination, determining if there is sufficient unused bandwidth on the network path to accommodate the LSP, and allocating the unused bandwidth of the network path to the LSP if there is sufficient unused bandwidth available. If the unused bandwidth is not allocated to the LSP, the method is repeated one or more times, each time with a network path having a progressively larger number of hops to the destination.

As explained above with respect to claim 1, Hsu does not disclose or suggest at least selecting a network path in a network that has a least number of hops to a destination, and repeating the method one or more times if the unused bandwidth is not allocated, each time with a network path having a progressively larger number of hops to the destination. Accordingly, claim 13 is believed to be allowable.

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Amended independent claim 32 is a computer program claim that roughly corresponds to claim 13; and amended independent claim 53 is an apparatus claim that roughly corresponds to claim 13. These claims are also believed to be allowable for at least the reasons noted above.

The remaining art of record has been reviewed and is not understood to disclose or to suggest anything that would remedy the foregoing deficiencies of the applied references against the claims. Accordingly, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Please apply any deficiencies in fees for this Amendment to Deposit Account No. 06-1050 referencing 10360-046001.

Applicants' attorney can be reached at the address shown above. Telephone calls regarding this application should be directed to 617-521-7896.

Respectfully submitted,

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